Special Issue

Advances in Wide Bandgap Semiconductor for Power Device Applications

Message from the Guest Editor

Wide-bandgap semiconductors are considered as materials for the next generation of power devices. SiC-based switches and diodes are commercially available and have led to a significant improvement of power efficiency. Gallium nitride is another promising wide-bandgap semiconductor that can be used for high-frequency and high-power amplifier applications. Although the bulk properties of SiC and GaN substrates are much better than those of Si substrates, the current SiC and GaN power devices are not utilizing their full potential because of performance limitations originated from interface and gate stacks. This Special Issue hopes to provide a timely overview of the recent progress on wide-bandgap semiconductors and to highlight any remaining issues that need to be addressed in the future.

Guest Editor

Prof. Dr. Bongmook Lee
Department of Electrical and Computer Engineering, North Carolina State University, 27607 Raleigh, NC, USA

Deadline for manuscript submissions

closed (15 August 2021)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/26021

Electronics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
electronics@mdpi.com

mdpi.com/journal/electronics

Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/journal/electronics

MDPI

About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero
Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).